



FELD3002CIP1_ST25
SEQUENCE LISTING

<110> Feldmann, Richard J.
<120> Modifying the Control of Gene Expression Behavior by the Deletion of Connectrons and by the Design and Addition of Synthetic Connectrons in Prokaryotic, Archea and Eukaryotic Genomes
<130> FELD3002CIP1/ESS
<140> US 10/609,383
<141> 2003-07-01
<150> US 09/866,925
<151> 2001-05-30
<150> US 60/393,558
<151> 2002-07-05
<160> 34
<170> PatentIn version 3.5
<210> 1
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<213> *Saccharomyces cerevisiae* complete genome

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<222> (12572)..(12788)
<223> Chromosome = 1 Strand = positive Connectron Object Number = 36

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gaagtaattt cctgacttgt tggtaacagg gtaatgtatga agtaatttcc 180
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<210> 2
<211> 236
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<222> (12572)..(12807)
<223> Chromosome = 1 Strand = positive Connectron Object Number = 39

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gaagtaattt cctgacttgt tggtaacagg gtaatgtatga agtaatttcc 180
tgacttggtaa ttgtactggtaa aacaggtggtaa aatgtatgaa cagtttcctg gcttgt 236

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<210> 3
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<222> (24863)..(25028)
<223> Chromosome = 1 Strand = negative Connectron Object Number = 112

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cttggttac cgtgacatcc tgcgaatctc atgtgtgcac tgaatc 166

<210> 4
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<223> Chromosome = 1 Strand = positive Connectron Object Number = 4651a

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<210> 5
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<212> DNA
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<222> (705150)..(705203)
<223> Chromosome = 1 Strand = negative Connectron Object Number = 811a

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<210> 6
<211> 36
<212> DNA
<213> *Escherichia coli* k12 MG1655 complete genome

<220>
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<222> (757718)..(757753)
<223> Chromosome = 1 Strand = negative Connectron Object Number = 975

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<400> 6
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<210> 7
<211> 37
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<213> Escherichia coli k12 MG1655 complete genome

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<223> Chromosome = 1 Strand = positive Connectron Object Number = 4651a

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<222> (698713)..(698766)
<223> Chromosome = 1 Strand = negative Connectron Object Number = 809

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<223> Chromosome = 1 Strand = negtive Connectron Object Number = 975

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<223> Chromosome = 2 Strand = positive Connectron Object Number = 792a

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<210> 11
<211> 16
<212> DNA
<213> *Saccharomyces cerevisiae* complete genome - problem

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<221> misc_feature
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<223> Chromosome = 2 Strand = positive Connectron Object Number = 793

<400> 11
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<210> 12
<211> 539
<212> DNA
<213> *Saccharomyces cerevisiae* complete genome - problem

<220>
<221> misc_feature
<222> (448454)..(448992)
<223> Chromosome = 5 Strand = positive Connectron Object Number = 4749

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gcatctagga agtaacctt g tacgaaaata ggcaatattt cctgttttagg cgattgtgac 120
gcagattttt a gtccaaacgat ct tagcgtcaa ggaattttt tatagtggg a cattgcacca 180
aggaagtaac ttgatacgtc gtgggtgaat gggtctgttt tcttattcgg cggggtataa 240
cattttggg ggaagtttg ctgtctgacg cgccatatgt aggtacgcca aaaaggggctc 300
ctctacttcg a aagcgcgagg tcgtataacct aataaggaaa tgtaattt aacttttat 360
tatattggtc ttttcgagag cggaacgtag gtccatgttt aaagtatcca agagaatatc 420
cacgaagcgg ctgagcaacg aacagaatcc tggttctcct cgactaagca gatagttaag 480
atactgtgca ccatggaaat tgaaaacgaa agtacgtacc gactacttta ttttgcag 539

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<220>
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<222> (24863)..(25028)
<223> Chromosome = 5 Strand = negative Connectron Object Number = 4824a

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gcagatttt	a	gtccaacgat	ctagcgtcaa	ggaatttt			158
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<221>	misc_feature						
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caatccaagg	ggtc					134	
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<213>	Halobacterium sp. NAC-1 complete genome						
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ccgcgcatcg	ccgcccgcgt	cctcatcaac	accgcggct	acctccaatc	caaggggtcg	120	
gcaaccggtg	aggaagcctc	cgcacaggtc	tccaaccgca	tcaacatcgt	ctccgcgtac	180	
ggcaacgtca	aca					193	
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<213>	Halobacterium sp. NAC-1 complete genome						
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<222>	(773399)..(773483)						
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	6852						
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gtggggatcg gcacgctcat cgtttcatc	gcatggtgc tggcgccgc gatgccgccc	60
ggcgtcctca tcaacactgc cggct		85
<210> 17		
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<212> DNA		
<213> Pseudomonas aeruginosa PA01, complete genome		
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<221> misc_feature		
<222> (4832718)..(4832838)		
<223> Chromosome = 1 Strand = positive Connectron Object Number = 53464		
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aaggcatct ccgagcagac caacctgctc gccctcaacg ccgccatcga agccgcgcgc		120
g		121
<210> 18		
<211> 194		
<212> DNA		
<213> Pseudomonas aeruginosa PA01, complete genome		
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<221> misc_feature		
<222> (4836528)..(4836720)		
<223> Chromosome = 1 Strand = positive Connectron Object Number = 53531		
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cagcgccctcc tgcgccaaca tcgaggccct caacagccgc acggtaaca tcggccagat		120
cctcgaagtgc atcaaggca tctccgagca gaccaacctg ctcgcctca acgcccatt		180
cgaagccgcg cgcg		194
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<212> DNA		
<213> Pseudomonas aeruginosa PA01, complete genome		
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<221> misc_feature		
<222> (4838678)..(4838846)		
<223> Chromosome = 1 Strand = positive Connectron Object Number = 53549a		
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gccctcaaca gccgcacggt gaacatcgcc cagatcctcg aagtgtatcaa gggcatctcc		120

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gagcagacca acctgctcg cctcaacgcc gccatgaag ccgcgcgcg 169

<210> 20

<211> 36

<212> DNA

<213> Sequence Recognized by Synthetic DNA Binding Protein

<400> 20

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36

<210> 21

<211> 136

<212> DNA

<213> Vibrio cholerae chromosome I, complete chromosome

<220>

<221> misc_feature

<222> (952641)..(952777)

<223> Chromosome = 1 Strand = negative Connectron Object Number = 607

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60

catagataga ctatgtgatt ggggtgaacg aacgtagcca acaccgctgc agttcaagt

120

aggaagggtta tacctt

136

<210> 22

<211> 117

<212> DNA

<213> Vibrio cholerae chromosome I, complete chromosome

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<221> misc_feature

<222> (1005810)..(1005926)

<223> Chromosome = 1 Strand = negative Connectron Object Number = 646

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cagactatgt gattgggtg aacgaacgta gccaataccg ctgcagcttc aagtagg

117

<210> 23

<211> 36

<212> DNA

<213> Sequence Recognized by Synthetic PNA

<400> 23

tccccatgag catagatatg caggtaggcg gcaagt

36

<210> 24

<211> 136

<212> DNA

<213> Vibrio cholerae chromosome I, complete chromosome

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<220>
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<223> Chromosome = 1 Strand = negative Connectron Object Number = 607

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aggaaggta tacctt 136

<210> 25
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<212> DNA
<213> Vibrio cholerae chromosome I, complete chromosome

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<223> Chromosome = 1 Strand = negative Connectron Object Number = 646

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cagactatgt gattgggtg aacgaacgta gccaataccg ctgcagcttc aagttagg 117

<210> 26
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<212> DNA
<213> Sequence Recognized by Synthetic Linked Pair of DNA Binding Objects

<400> 26
cccgacacaa cctgc 15

<210> 27
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<212> DNA
<213> Sequence Recognized by Synthetic Linked Pair of DNA Binding Objects

<400> 27
cccggggttc ccgag 15

<210> 28
<211> 64
<212> DNA
<213> Aeropyrum pernix k1 complete genome

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<221> misc_feature
<222> (284008)..(284070)
<223> Chromosome = 1 Strand = negative Connectron Object Number = 218

<400> 28
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cggc

64

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<223>	Chromosome = 1 Strand = negative Connectron Object Number = 295					
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aucuccucau ggug

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14